

REMARKS

Examiner Quoc Dinh Hoang is thanked for the thorough examination and search of the subject Patent Application.

All Claims are believed to be in condition for Allowance, and that is so requested.

Reconsideration of the rejected claims 22 and 26 under 35 USC §112 because of insufficient antecedent basis for limitations is requested, is requested based on amended claims and on the following remarks.

Claims 22 and 26 have been amended:

- 22.** (currently amended) A method to fabricate a two-level DRAM cell requiring a reduced output current, comprising:
- providing a capacitor, a natural transistor as pass transistor, and peripheral circuitry to activate and to drive said DRAM cell comprising standard transistors, a current source and an amplifier;
  - mask the channel of the natural transistor to avoid any impurities caused by ~~at~~ the following ion implant step;
  - perform ion implant to define threshold voltage of the standard transistors as part of the DRAM cell; and
  - remove mask from natural transistor and continue standard processes.

- 26.** (currently amended) A method to fabricate a multi-level DRAM cell requiring a reduced output current, comprising:  
providing a capacitor, a natural transistor as pass transistor, and peripheral circuitry to activate and to drive said DRAM cell comprising a multiplexer containing transistors to activate a desired voltage level, a transistor to activate a read-out of said DRAM cell, an analog-to digital converter, a current source and an amplifier;  
mask the channel of the natural transistor to avoid any impurities caused by ~~at~~ the following ion implant step;  
perform ion implant to define threshold voltage of the standard transistors as part of the DRAM cell; and  
remove mask from natural transistor and continue standard processes.

In both claims 22 and 26 the limitation "the following ion implant" has been replaced by "a following ion implant".

Reconsideration of the rejection of claims 22-29 under 35 U.S.C. 103 (a) as being unpatentable over Rolandi (US 5,923,975) in view of Brehmer et al. (US 5,805,021) (hereafter Brehmer) is requested, based on following remarks:

None of the applied or known references address the claimed invention as shown in claims 22-29 in which methods to fabricate a two-level DRAM (Claim 22) or to fabricate a multi-level DRAM cell (Claim 26), both requiring a reduced output current are described. In both references, Rolandi and Brehmer, the word "DRAM" not even appears at all.

Roland teaches a "fabrication of natural transistors in a non-volatile memory process" and Brehmer teaches a "high swing, low power general purpose operational amplifier". The combination of a non-volatile memory (Rolandi) with an operational

amplifier (Brehmer) is believed to be non-obvious to achieve DRAM cells as taught by the claimed invention. The invention is believed to be patentable over the prior art cited, as it is respectfully suggested that the combination of these various references cannot be made without combination of these various references cannot be made without reference to Applicant's own invention. None of the applied references address or suggest a fabrication of DRAMs at all while the fabrication of DRAMs requiring reduced output current is a problem solved by invention. Applicant has claimed his process in detail.

The processes of Claims 22-29 are believed to be novel and patentable over these various references, because there is not sufficient basis for concluding that the combination of claimed elements would have been obvious to one skilled in the art. That is to say, there must be something in the prior art or line of reasoning to suggest that the combination of these various references is desirable. We believe that there is no such basis for the combination. We therefore request Examiner Quoc D. Hoang reconsider his rejection in view of these arguments and the amendments to the Claims.

Applicants have reviewed the prior art made of record and not relied upon and have discussed their impact on the present invention above.

Allowance of all Claims is requested.

It is requested that should the Examiner not find that the Claims are now Allowable that the Examiner call the undersigned at 845-452-5863 to overcome any problems preventing allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'SBA', with a long horizontal flourish extending to the right.

Stephen B. Ackerman, Reg. No. 37,761